TRAKHTENBERG, I.M., dotsent; VERZHIKOVSKAYA, N.V., kand.med.nauk

Effect of low concentrations of mercury on the dynamics of absorption of radioactive iodine by the thyroid gland. Vrach. delo no.2:171-173 F '59. (MIRA 12:6)

1. Kafedra gigiyeny truda (zav. - chlen-korr.AMN SSSR, prof. G.Kh.Shakhbazyan) i kafedra obshchey gigiyeny (zav. - prof. P.I.Barannik) Kiyevskogo meditsinskogo instituta.
(MERCURY--PHYSIOLOGICAL EFFECT) (IODINE METABOLISM)
(THYROID GLAND)

LOZHKINA, Ye.I.; TRAKHTENBERG, I.M.; KHOTSYANOV, L.K., prof.

"So-called nonspecific effect of industrial poisons" by I.G.Fridliand. Reviewed by E.I.Lozhkina, I.M.Trakhtenberg, L.K.Khotsianov. Gig. i san. 24 no.3:89-93 Mr '59. (MIRA 12:5)

(INDUSTRIAL TOXICOLOGY) (FRIDLIAND, I.G.)

TRAKHTENBERG, I.M., dots.

Activities of the Kiev chapter of the All-Union Society of Hygienists.
Gig. i san. 23 no.12:83-86 D '58. (MIRA 12:1)
(KIEV--PUBLIC HEALTH SOCIETIES)

USSR/Human and Animal Physiology - Physiology of Work and Sport. T-12

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32284

Author : Trakhtenberg, I.M., Savitskiy, I.V.

Inst :

Title : Experimental Data on the Phenomenon of Sechenov During Dynamic Work. Report I. Types of Change of Work Ability of Muscles after Passive and Active Interuptions.

Orig Pub : Byul. eksperim. biol. meditsiny, 1956, 42, No 8, 12-15.

Abstract : In conformity with the division of rest after muscular work into 4 stages (M.V. Leynik), the authors showed that the work ability of the muscles after a two-minute active rest changes predominantly according to type V and D, the first of which differs by having a higher (in comparison with previous work) level of miscular strength, the second - by an increase of the intensity of the prefatigue period and a decrease of the degree of fatigue. Passive rest changed subsequent work according th type A - with an

Card 1/2

TRAKHTENBERG, I. M.

LEYNIK, Mikhail Vladimirovich, prof.; STARCHENKO, S.M. [translator]; TRAKHTENBERG, I.M., red.; LOKHMATIY, Yu.G., tekhn.red.

[Problems in physiology of labor in socialist agriculture] Pytannia fiziologii v sotsialistychnomu sil's'komu hospodarstvi. Kyiv, Derzh. med.vyd-vo URSR, 1957. 92 p. (MIRA 11:3)
(AGRICULTURAL LABORERS--DISEASES AND HYGIENE)
(WORK)

TRAKHTENBERG, I.M.; SAVITSKIY, I.V.

Experimental data on Sechnev's phenomenon in dynamic activity. Report no.1: Types of modifications in the capacity of muscles following passive and active interruptions. Biul.eksp.biol. i med. 42 no.8: 12-15 Ag '56. (MLRA 9:11)

1. Iz kafedry gigiyeny truda (zav. - prof. G.Kh.Shakhbazyan) Kiyevskogo meditsinskogo instituta (dir. I.P.Alekseyenko). Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Gorevym.

(MUSCLES, physiology,
eff. of characteristics and duration of rest on working capacity of musc. after work (Rus))
(WORK, physiology,
same)

TRAKHTENBERG, I.M.; SAVITSKIY, I.V. [Savyts'kyi, I.V.];
TRINUS, F.P. [Trynus, F.P.]

Analysis of the hypotensive effect during the action of agents inactivating SH groups. Fiziol. zhur. [Ukr.] 9 no.6:748-752 N-D '63. (MIRA 17:8)

1. Kafedra farmakologii i kafedra gigiyeny trudy i professional'nykh zabolevaniy Kiyevskogo meditsinskogo instituta im. akad. Bogomol'tsa.

L 33060-66 EWT(1) RO
ACC NR: AP6024158 SOURCE CODE: UR/0240/66/000/003/0116/0117

34
B

REVIEWER: Trakhtenberg, I. M. (Doctor of medical sciences)

ORG: none

TITLE: Review of "Intoksikatsii rtut'organicheskimi yadokhimikatami" (Poisoning by organomercury poisonous chemicals), Moscow, 1964, by S. I. Ashbel'

SOURCE: Gigiyena i sanitariya, no. 3, 1966, 116-117

TOPIC TAGS: organomercury compound, poison effect, toxicology, pathogenesis, diagnostic medicine, preventive medicine, antidote, drug treatment, pesticide

ABSTRACT: The author examines in detail the symptoms, course, and treatment of mercury poisoning and describes acute and chronic cases. He presents a mass of material obtained in the USSR and abroad on the various effects of the compounds on the body. Separate chapters are devoted to the use of organomercury pesticides, their toxicology, pathogenesis, and methods of determining mercury in biological substrates, diagnosis of poisonings, long-term effects, treatment, and above all, prevention. Antidotes to mercury poisoning, especially of unitol (2-3 dimercapto-propane sodium sulfonate) directly in the respiratory tract, are discussed in full. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 fdi

UDC: 615,778.3-099(049.3)

0915 1743

TRAKHTENBERG, I.M.

Effect of mercury on some indices of immunity. Zhur. mikrobiol., epid. i immun. 40 no.11:144 N '63. (MIRA 17:12)

1. Iz Kiyevskogo meditsinskogo instituta.

SHAKHBAZYAN, G.L., prof., otv. red.; TRAKHTENBERG, I.M., dots., red.; SAVITSKIY, I.V., kand. med. nauk, red.; GABOVICH, R.D., red

[Problems of industrial and agricultural toxicology] Voprosy promyshlennoi i sel'skokhoziaistvennoi toksikologii. Kiev, Zdorov'e, 1964. 197 p. (MIRA 18:2)

1. Kiev. Medychnyi instytut. 2. Chlen-korrespondent AMN SSSR (for Shakhbazyan).

ABRAMOVA, Zh.I., kand. med. nauk; GADASKINA, I.D., prof.; GOLUBEV, A.A., kand. med. nauk; DANISHEVSKIY, S.L., prof.; ZIL'BER, Yu.D., kand. med. nauk; LAZAREV, L.N., kand. khim. nauk; LEVINA, E.N., doktor med. nauk; LOYT, A.O.; LYUBLINA, Ye.I., doktor biol. nauk; LYKHINA, Ye.T., kand. biol. nauk; MINKINA, N.A., kand. med. nauk; RUSIN, V.Ya., kand. med. nauk; SALYAMON, L.S., kand. med. nauk; SPERANSKIY, S.V., TRAKHTENBERG, I.M., dots.; FILOV, V.A., kand. biol. nauk; TSIRK, K.G., kand. med. nauk; CHEKUNOVA. M.P., kand. med. nauk; GRIVA, Z.I., red.; LAZAREV, N.V., zasl.deyat.nauki,prof., red.; LEVIN, S.S., tekhn. red.; BASINA, M.Z., tekhn. red.

[Toxic industrial substances; handbook for chemists, engineers and physicians] Vrednye veshchestva v promyshlennosti; spravochnik dlia khimikov, inzhenerov i vrachei. Izd.4., perer.i dop. Leningrad, Goskhimizdat. Pt.2.[Inorganic and metalloorganic compounds] Neorganicheskie i elementorganicheskie soedineniia. 1963. 619 p. (MIRA 17:2)

SHAKHBAZYAN, C.Kh; TRAKHTENBERG, I.M.

Problems of the hygienic evaluation of chemical factors in an industrial environment. J.hyg.epidem. 7 no.3:310386 '63.

1. Kiev Medical Institute, Kiev.

TRAKHTENBERG, I.M., dotsent (Kiyev); GIMADEYEV, M.M., kand.med.nauk (Ufa)

Effect of small mercury vapor concentrations on the body. Vrach. delo no.6:103-108 Je'63. (MIRA 16:9)

1. Kafedra gigiyeny truda (zav. - chlen-korrespondent AMN SSSR prof. G.Kh.Shakhabazyan) Kiyevskogo meditsinskogo instituta i otdel gigiyeny truda (zav. - kand.med. nauk M.M. Gimadeyev) Ufimskogo nauchno-issledovatel'skogo instituta gigiyeny.

(MERCURY—TOXICOLOGY)

BARANNIK, P.I., red.; BARCHENKO, I.P., red.; GABOVICH, R.D., red.; KAGAN, S.S., red.; KALYUZHNYY, D.N., red.; KRIVOGLAZ, B.A., red.; POZNANSKIY, S.S., red.; SUPONITSKIY, M.Ya., red.; TRAKHTENBERG, I.M., red.; SHAKHBAZYAN, G.Kh., red.; SHMAL', D.D., red.; USETROV, V.I., red.; CHUCHUPAK, V.D., tekhn.red.

[Problems of general and specialized hygiene] Voprosy obshchei i chastnoi gigieny. Kiev, Gosmedizdat USSR, 1963. 308 p. (MIRA 16:10)

1. Ukraine. Ministerstvo zdravookhraneniia.
(PUBLIC HEALTH)

SHAKHBAZYAN, G.Kh., prof.; TRAKHTENBERG, I.M., dotsent (Kiyev)

"Data on the history of hygiene and sanitation in the Ukraine."
Reviewed by G.Kh.Shakhbazian, I.M.Trakhtenberg. Vrach.delo no.3:
153-155 Mr '63. (MIRA 16:4)
(UKRAINE--PUBLIC HEALTH)

TRAKHTENBERG, I.M.

The danger of micromercurialism and its prevention under laboratory conditions. Lab.delo 8 no.8:18-24 Ag '62. (MIRA 15:9)

1. Kafedra gigiyeny truda (zav. - chlen-korrespondent AMN SSSR prof. G.Kh.Shakhbazyan) Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta imeni akademika A.A.Bogomol'tsa.
(MERCURY--TOXICOLOGY) (AIR--POLLUTION)
(LABORATORIES--SAFETY MEASURES)

TRAKHTENBERG, I.M.

"Labor hygiene in machine and tractor workshops of repair and supply stations" by R.D. Gabovich and P.N.Maistruk. Reviewed by I.M.Trakhtenberg. Gig. truda i prof. zab. 4 no.4:59 Ap '60. (MIRA 15:4)

(REPAIR AND SUPPLY STATIONS--HYGIENIC ASPECTS)
(GABOVICH, R.D.) (MAISTRUK, P.N.)

TRAKHTENBERG, I. M.; PAUSTOVSKAYA, V. V.; BRAVERMAN, R. S. (Kiyev)

Hygienic evaluation of work conditions in the production of linoleum, polychlorvinyl and coumarone tiles. Gig. truda i prof. zab. no.1:53-55 '62. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut, sanitarno-epidemiologicheskaya stantsiya Pecherskogo rayona.

(INDUSTRIAL HYGIENE) (FLOOR COVERINGS)

TRAKHTENBERG, I.M., dotsent

General and specific factors in the action of chemical stimuli.
Nek.filos.vop.med.i est. no.2:329-344 '60. (MIRA 15:7)

1. Kafedra gigiyeny truda Kiyevskogo meditsinskogo instituta imeni Bogomol'tsa.

(STIMULANTS)
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

VOL'FSON, Z.G., prof.; TRAKHTENBERG, I.M., dotsent

"Textbook on hygiene" by R.D.Gabovich. Reviewed by Z.G.Vol'fson. I.M.Trakhtenberg. Gig. i san. 26 no.8:117-119 Ag '61. (MIRA 15:4)
(PUBLIC HEALTH) (GABOVICH, R.D.)

TRAKHTENBERG, I.M., dotsent (Kiyev)

Some problems in establishing the hygienic level of chemical substances in the air. Vrach. delo no.5:122-126 My '61.
(MIRA 14:9)

(AIR--POLLUTION)

TRAKHTENBERG, I.M., dotsent

Work of the Kiev branch of the All-Union Society of Hygienists for 1959-1060. Gig. i san. 26 no.2:117-119 F '61. (MIRA 14:10)
(KIEV--PUBLIC HEALTH SOCIETIES)

TRAKHTENBERG, I.M.

Experimental material on the toxicology and hygienic standards of chemical factors in the industrial environment. Vest. AMN SSSR 15 no.8:30-41 '60. (MIRA 13:11)

1. Kiyevskiy meditsinskiy institut.
(INDUSTRIAL HYGIENE)

SHAKHBAZYAN, Gaykh Khachaturovich, prof.; TRAKHTENBERG, Isaak Mikhaylovich, kand. med. nauk; NEYMAN, M.I., red.; BEL'CHIKOVA, Yu.S., tekhn. red.

[Hygiene of mental labor] Gigiena umstvennogo truda. Moskva, Gos. izd-vo med.lit-ry Medgiz, 1961. 70 p. (MIRA 14:7)

1. Chlen-korrespondent Akademii meditsinskikh nauk (for Shakhbazyan)
(MENTAL HYGIENE)

126-1-39/40

AUTHORS: Arkharov, V. I., Konev, V. N., Trakhtenberg, I. Sh. and Shumilina, S. V.

TITLE: Oxidation of chromium in air and in oxygen. (Okisleniye khroma v vozdukhe i kislorode).

PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol.5, No.1, pp. 190-191 (USSR)

ABSTRACT: On the basis of experiments of various authors it can be concluded that the scale on chromium oxided in oxygen as well as in air consists of rhombohedric Cr_2O_3. On the basis of indirect indications the assumption was expressed of the existence of γ-Cr_2O_3 but this has not been established experimentally. The influence of the air nitrogen on the process of oxidation has not been taken into consideration by previous authors, although in principle such an influence is possible at elevated temperatures. In other work of one of the authors (Ref.5) formation of a nitride was observed on the X-ray diffraction patterns as a result of nitriding of chromium which was similar to that interpreted in earlier work (Ref.4) as a sign of presence of γ-Cr_2O_3. For getting a more accurate picture on the mechanism of the phenomenon, the authors

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Oxidation of chromium in air and in oxygen. 126-1-39/40

investigated the oxidation of chrom ium in air and in oxygen. At various temperatures the kinetics of the scale formation was studied (from the gain in weight of the specimen) and also the phase composition and the texture in the layers of the forming scale (by X-ray diffraction) and the microstructure of the layers. The specimens of electrolytic chromium were made in the form of hollow cylinders by a method described in earlier work (Ref.4). The oxidation in air was effected in a vertical electric furnace whereby the specimen was suspended on a tray of an analytical balance located above the furnace, so that the weight increase could be determined without removing the specimen from the hot part of the furnace. Oxidation in oxygen at a pressure of 160 mm Hg was effected in a closed vertical quartz tube placed inside a tubular electric furnace; by means of a special gate the specimen was displaced from the top, cold part into the hot part without disturbing the atmosphere of the tube and, after a fixed oxidation time, the displacement was in the opposite direction. Oxidation in oxygen was effected at 700, 880 and 1000°C; only a single phase was observed in the scale. Oxidation in

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Oxidation of chromium in air and in oxygen. 126-1-39/40

the room atmosphere was effected at the same temperatures. The outside appearance of the scale was the same for both series of specimens. In the X-ray diffraction patterns an additional diatropic maximum was observed from the layer located between the metal and the outside layer of the rhombohedric chromium oxide; the Debye pattern of this layer is in good agreement with that obtained for the hexagonal Cr_2N and the diatropic maximum d = 1.37 Å also belongs to Cr_2N. Metallographic investigations confirmed the presence of two layers in the scale of chromium oxided in air.

There are 7 references, 4 of which are Slavic.

SUBMITTED: May 29, 1957.

ASSOCIATION: Ural State University imeni A. M. Gor'kiy. (Ural'skiy Gosudarstvennyy Universitet imeni A.M.Gor'kogo).

AVAILABLE: Library of Congress.

Card 3/3

TRAKHTENBERG, I. M., dotsent

Laboratory of a sanitation and epidemic station. Gig. i san. 22 no.4:43-46 Ap '57. (MLRA 10:6)

1. Iz kafedry gigiyeny truda Kiyevskogo meditsinskogo instituta
(LABORATORIES, MEDICAL,
of sanit.-epidemiol. station (Rus))

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Investigating the diffusive properties of transition metal chalcogenides. Part 3: Self-diffusion of nickel in nickel oxide. Fiz. met. i metalloved. 14 no.3:428-433 S '62. (MIRA 15:9)

1. Institut fiziki metallov AN SSSR.
(Diffusion) (Nickel)

S/126/62/014/003/012/022
E021/E435

AUTHORS: Klotsman, S.M., Timofeyev, A.N., Trakhtenberg, I.Sh.

TITLE: Investigation of the diffusion properties of chalcogenides of transition metals.
III. Self-diffusion of nickel in nickel oxide

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.3, 1962, 428-433

TEXT: The coefficient was determined of self-diffusion of nickel in the scale growing during oxidation of electrolytic nickel (99.99%) samples (15 x 15 x 3 mm). The source of diffusion was a 10 mm diameter, 0.1 μ thick spot of nickel, labelled by Ni^{63}, vacuum-sprayed on the polished surface of the sample. The samples were heated in air in a furnace controlled to ± 3°C. After diffusion, parallel 10 ± 2 μ thick layers were removed mechanically from the surface and then the total activity of the samples was measured. For calculating the coefficient of diffusion the relation $\log I = f(x^2)$ was constructed (I - integral activity and x - depth). It was found that the temperature relationship of the coefficient of self-diffusion of nickel in

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nickel oxide in the range 1190 to 1400°C is

$$D = 4.8 \times 10^{-4} \exp\left[-(48.4 \pm 2.0) \times 10^3/RT\right] \text{ cm}^2/\text{sec}.$$

It is proposed that the divergence in absolute values of the coefficient of self-diffusion from the data in the literature is connected with differences in purity of the samples. The results showed absence of any marked contribution by intercrystalline diffusion of nickel in nickel oxide to the total diffusion. In the investigated temperature interval, diffusion of the metal through the scale plays a preferential role in the oxidation of nickel. There are 2 figures and 1 table.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals, AS USSR)

SUBMITTED: January 12, 1962

18.7500 1555

85967
S/126/60/010/005/015/030
E111/E452

AUTHORS: Klotsman, S.M., Timofeyev, A.N. and Trakhtenberg, I.Sh.

TITLE: Measurement of Diffusion Coefficients in Oxide Phases

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol.10, No.5, pp.732-735

TEXT: The authors point out that investigations of diffusion in scale are difficult and are, therefore, often (Ref.1 to 6) carried out on sintered compacts. The present investigation was on single crystals of magnetite as well as such compacts of the crushed single crystals. Compression was at 3000 kg/cm^2 and sintering was at 1100°C for 60 hours in purified argon. Diffusion annealing was effected in the same atmosphere with specimens in pairs (1 tablet with 1 single crystal) and their active sides (deposit of iron containing Fe^{55}) inwards. The diffusion coefficient was determined to ± 15%. Correction was made for the concentration distribution of the diffusing element in removed layers, as previously described by the authors (Ref.8). Self-diffusion coefficient values for iron at 850 to 1075°C were found to be represented by

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S/126/60/010/005/015/030
E111/E452

Measurement of Diffusion Coefficients in Oxide Phases

$6 \times 10^5 \exp(84.0 \pm 5.9) \frac{kcal}{mol} / RT \quad \frac{cm^2}{sec}$ for single crystals and

$1 \times 10^4 \exp(74.7 \pm 4.5) \frac{kcal}{mol} / RT \quad \frac{cm^2}{sec}$ for compacts.

The activation energies differ from some published values (Ref.9) whose experimental points are represented in Fig.1 with those of the present work. The difference between values for the two types of specimen used tend to decrease as temperature rises (annealing at 1300°C eliminates significant differences). Fig.2 shows plots of a value proportional to specific activity of the diffusing element against the square of the depth below the active layer (Curves 1 and 2 for compact and single crystal respectively): the anomalously sharp fall in the activity parameter close to the active layer makes it impossible to determine the "volumetric" diffusion coefficient of compacts from the initial part of the concentration curve. There are 2 figures, 1 table and 11 references: 5 Soviet and 6 Non-Soviet.

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85967
S/126/60/010/005/015/030
E111/E452

Measurement of Diffusion Coefficients in Oxide Phases

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

SUBMITTED: May 3, 1960

Card 3/3

ACCESSION NR: AP4009383 S/0126/63/016/006/0895/0903

AUTHORS: Klotsman, S. M.; Timofeyev, A. N.; Trakhtenberg, I. Sh.

TITLE: On the problem of diffusion in polycrystals

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 6, 1963, 895-903

TOPIC TAGS: volumetric diffusion, intercrystalline diffusion, diffusate, intercrystalline junction, nickel, chromium, silver, heterodiffusion, electric transport, ferric oxide, self diffusion, reaction diffusion, face centered lattice

ABSTRACT: The authors studied the laws of diffusion in polycrystals and the contribution of intercrystalline diffusion to the total diffusion current. The following expressions were obtained for the concentration Q_{gr} of the diffusate due to intercrystalline diffusion and for Q_{ob} and the concentration due to volumetric diffusion, at a point distance y from the source

$$Q_{ob} = K \exp\left(-\frac{y^2}{4D_{ob}t}\right) \text{ and } Q_{gr} = K' \exp\left[-\left(\frac{2D_{ob}}{\delta D_{gr}}\right)^{\frac{1}{2}} \frac{y}{(\pi D_{ob}t)^{\frac{1}{4}}}\right],$$

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ACCESSION NR: AP4009383

Here K and K' are time-dependent coefficients governing the volumetric diffusion and the intercrystalline diffusion respectively, D_{ob}, and D_{gr} are the corresponding diffusion coefficients, δ is the effective width of the intercrystalline junction, and t the diffusion time. The experimental results available in literature were analyzed, and a criterion was obtained for estimating the temperature range in which the diffusion would be mainly volumetric or intercrystalline. It was found that the temperature range for silver was about 100-150C and for nickel it was 150-280C. The authors analyzed the available results on heterodiffusion and electrical transport in nickel. They discuss the possibility of improving the accuracy of diffusion measurements. From an analysis of the data obtained in the electrical transport in chromium in a temperature range of 950-1100C and in silver in a range of 950-1350C it was found that the lower limit for the recovery of polycrystals was about 0.85 to 0.9 times the melting point of the metal (in the case of metals with face-centered lattices). In the case of nickel, the temperature for self-diffusion was found to be about 1250-1300C. The authors thank V. I. Arkharov for his valuable discussions. Orig. art. has: 5 formulas and 2 tables.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Physics of Metals, AN SSSR)

Card 2/3

ACCESSION NR: AP4009383

SUBMITTED: 06Apr63

SUB CODE: MM, SS

NO REF SOV: 019

ENCL: 00

OTHER: 013

Card 3/3

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Investigating the diffusion properties of transition metal chalcogenides. Part 4: Temperature dependence of the anisotropy of the self diffusion of nickel and sulfur in nickel monosulfide. Fiz. met. i metalloved. 16 no.5:743-750 N '63. (MIRA 17:2)

1. Institut fiziki metallov AN SSSR.

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Diffusion in polycrystals. Fiz. met. i metalloved. 16 no.6:895-903 D '63. (MIRA 17:2)

1. Institut fiziki metallov AN SSSR.

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Intercrystalline self-diffusion of silver in an electric field.
Fiz. tver. tela 5 no.11:3276-3281 N '63. (MIRA 16:12)

1. Institut fiziki metallov AN SSSR, Sverdlovsk.

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Mechanism of the diffusion of impurities in germanium. Fiz. met.i metalloved. 14 no.6:925-927 D '62. (MIRA 16:2)

1. Institut fiziki metallov AN SSSR.
(Germanium--Metallography) (Diffusion)

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Self-diffusion of electron transfer in intercrystallite joining silver. Fiz.met.i metalloved. 14 no.5:793-795 N '62.
(MIRA 15:12)

1. Institut fiziki metallov AN SSSR.
(Silver--Electric properties) (Diffusion)

ARKHAROV, V.I.; KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Investigating the diffusion properties of transition metal monochalchogenides. Fiz. met. i metalloved. 14 no.1:68-74 Jl '62. (MIRA 15:7)

1. Institut fiziki metallov AN SSSR.
(Metal crystals) (Diffusion)

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Determination of diffusion coefficients by the method of an "integral remainder." Fiz.met. i metalloved. 7 no.2:295-298 F '59. (MIRA 12:6)

1. Institut fiziki metallov AN SSSR.
(Diffusion)

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Measurement of diffusion coefficients in oxide phases. Fiz. met. i metalloved. 10 no.5:732-735 N '60. (MIRA 14:1)

1. Institut fiziki metallov AN SSSR.
(Diffusion--Measurement)
(Phase rule and equilibrium)

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.; Prinimal uchastiye: MIROSHNIKOV, L.A., student

Investigating the diffusion properties of monochalcogenides of transition metals. Part 1. Self diffusion of nickel and sulfur in single nickel monosulfide crystals. Fiz. met. i metalloved. 12 no.3:463-464 S '61. (MIRA 14:9)

1. Institut fiziki metallov AN SSSR. 2. Ural'skiy gosudarstvennyy universitet (for Miroshnikov).
(Nickel) (Sulfur) (Diffusion)

24.7500

S/126/62/014/001/006/018
E071/E135

AUTHORS: Arkharov, V.I., Klotsman, S.M., Timofeyev, A.N., and Trakhtenberg, I.Sh.

TITLE: An investigation of diffusion properties of monochalcogenides of transitionary metals. II. Self-diffusion in polycrystals

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.1, 1962, 68-74

TEXT: Since no results of investigations of the laws of intercrystalline diffusion in chemical compounds have been published and study of these laws on polycrystalline chemical compounds and their comparison with the laws for elementary substances would give a basis for modelling the structure of intercrystalline linkages in chemical compounds, self-diffusion of Ni in mono- and polycrystals of nickel monosulphide in the temperature range 400-800 °C was studied radiometrically and by autoradiography. Both compounds were obtained by reaction between the individual components in evacuated and sealed ampules, subsequent melting and homogenation. Chemical and X-ray

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diffraction analyses confirmed that the specimens were single phased with a structure of the NiAs type. The diffusion was measured on specimens 3-4 mm in diameter and 10 mm thick, one face of which was covered with the diffusion source by vacuo spraying, using Ni^{53}, Co^{60} and Te^{125m} as diffusing elements. Unlike pure metals, predominant self-diffusion in polycrystals along the grain and mosaic block boundaries occurs at temperatures considerably above 0.6-0.7 of the melting temperature and the ratio of inter-crystalline diffusion permeability to the "volume" coefficient of self-diffusion amounts to 10^{-1} - 10^{-2} cm^3/sec. In single crystals of nickel monosulphide predominant diffusion along the grain and mosaic block boundaries occurs at even 0.6 times the melting temperature. The mechanism of scale formation during the process of reaction diffusion can be best studied by measuring the parameters of volume and boundary diffusion of phases entering the composition of the scale. There are 4 figures.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals, AS USSR)

Card 2/2
SUBMITTED: November 10, 1961.

/A

S/126/62/014/006/015/020
E073/E420

AUTHORS: Klotsman, S.M., Timofeyev, A.N., Trakhtenberg, I.Sh.

TITLE: On the mechanism of diffusion of impurities in germanium

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.6, 1962, 925-927

TEXT: In earlier work it was found that "rapidly diffusing" impurities have a low degree of solubility in germanium (10^{14} to 10^{15} cm^{-3} at 800°C), whilst the solubility of "slowly diffusing" impurities is larger by three to five orders of magnitude. According to Kosenko "slowly diffusing" impurities (zinc indium) have a "fast" component and conversely for Ag and Fe. For "fast diffusing" impurities the solubility in the range of "slow" diffusion is of the order of $10^{18}cm^{-3}$, i.e. in the range of solubility of "slowly diffusing" impurities. The ratio of the coefficients of "fast" and "slow" diffusion in germanium of Ag, Fe, In, Zn and Te at 800°C is 10^4 to 10^5 and the solubility ratios are respectively 10^2 to 10^4. The above-mentioned relations governing the diffusion of impurities in germanium are explained by

the fact that the impurities diffuse simultaneously in accordance with two mechanisms: along the vacant lattice points and interstitially, the latter causing "fast" diffusion. All available experimental data confirm the accepted view that "slow" diffusion is through the vacancy mechanism. According to published data, most of the investigated impurities, with the possible exception of lithium, move in the regular germanium lattice along thermally excited vacancies. In the presence of structural nonuniformities of the type of single dislocations or dislocation walls, there will be a flow along these nonuniformities. The "fast diffusing" impurities differ from those of groups III and V by the fact that they are particularly prone to diffusion along structural nonuniformities. These impurities which have a low solubility in germanium (Ag, Cu, Ni, Fe, Co) are apparently adsorption-active and enrich the structural nonuniformities. The behaviour of Cu and Ge shows that this conclusion is valid. The problem of interaction between the structural nonuniformities in Ge will be the subject of a separate paper.

Card 2/3

On the mechanism ... S/126/62/014/006/015/020
E073/E420

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

SUBMITTED: May 28, 1962

Card 3/3

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Intercrystallite electric transfer of silver in copper. Fiz. met. i metalloved. 16 no.4:611-612 O '63. (MIRA 16:12)

1. Institut fiziki metallov AN SSSR.

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Investigating the diffusion processes of monochalcogenides of transition metals. Part 5: Mechanism of the diffusion of nickel and sulfur in nickel monosulfide. Fiz. met. i metalloved. 17 no.1:132-139 Ja '64.
(MIRA 17:2)

1. Institut fiziki metallov AN SSSR.

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Effect of minor impurities on the coefficients of diffusion in polycrystalline materials. Part 4: Effect of cadmium on the intercrystalline self-diffusion of silver. Fiz. met. i metalloved. 20 no.1:78-83 Jl '65. (MIRA 18:11)

1. Institut fiziki metallov AN SSSR.

L 47410-66
ACC NR: AP6027[illegible] SOURCE CODE: GE/0030/66/016/002/0729/0736

AUTHOR: Archipova, N. K.; Klotsman, S. M.; Timofeev, A. N.; Trakhtenberg, I. Sh.

ORG: Institute of Metal Physics, Academy of Sciences SSSR, Sverdlovsk

TITLE: Effect of a d-c field on the lattice diffusion of silver-110 in copper and gold

SOURCE: Physica status solidi, v. 16, no. 2, 1966, 729-736

TOPIC TAGS: direct current field, lattice diffusion, silver 110, copper, gold, electron drag, matrix conductivity, electromigration

ABSTRACT: A study is made of the effect of direct current, with a density of about 100 to 150 amp/mm^2, on the diffusion of silver-110 in gold (99.99%) and high purity grade copper, at temperatures above 800C. Diffusion of silver-110 is measured by the residual activity method. The direction of the electromigration and the magnitude of the activated ions "effective charge" is clear indication of electron drag. The "effective charge" decreases linearly with an increase in

Card 1/2

L 47410-66
ACC NR: AP6027757

temperature. The temperature coefficient of the "effective charge" of silver in gold and copper is higher than the temperature coefficient of the matrix conductivity. Orig. art. has: 7 figures, 3 tables, and 10 formulas. [Authors' abstract]

[KS]

SUB CODE: 20/ SUBM DATE: 18Apr66/ ORIG REF: 011/ OTH REF: 006/

Card 2/2 vlr

L 16176-66 EWT(m)/T/EWP(t) IJP(c) JD

ACC NR: AP5025323 SOURCE CODE: UR/0126/65/020/003/0390/0395

AUTHOR: Klotsman, S. M.; Arkhipova, N. K.; Timofeyev, A. N.; Trakhtenberg, I. Sh.

ORG: Institute of Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Diffusion of silver in polycrystalline gold

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 390-395

TOPIC TAGS: silver, gold, volumetric analysis, crystal structure, polycrystal, metal diffusion

ABSTRACT: The present work is a continuation of an earlier investigation by the authors (FTT, 1964, 5, 11, 3978 and FMM, 1963, 16, 4, 611) who needed to know the diffusion of silver in polycrystalline gold in order to continue their research on the effect of an electric field on the intercrystalline diffusion of silver. The volumetric diffusion D_V of silver in gold at 770 - 1040C was determined first by using two methods: (1) the relation of integral intensity I of the γ component of the radiation of silver 110 on the depth of diffusion penetration x, and (2)

Card 1/2 UDC: 539.292 :548.0

by the direct use of measured values of integral activity. The effect of temperature on the value of D_v was represented by the straight line in the coordinates $\log D_v = f(1/T)$. The formula was derived for the calculation of volumetric diffusion of silver into polymetallic gold:

$$D_{об} = 0{,}083 \exp\left(-\frac{40\,400 \pm 500}{RT}\right) см^2/сек.$$

This agreed well with the results obtained by Mallard et al. (Phys. Rev., 1963, 129, 2, 617). Diffusion annealing at a temperature range of 540- 275C was made for determining the coefficient of intergranular diffusion D_g. Calculation of D_g was made by the Fisher method (J. Appl. Phys., 1951, 22, 74). The final equation is

$$\delta D_{гр} = 9{,}5 \cdot 10^{-10} \exp\left(-\frac{16\,200 \pm 800}{RT}\right) см^3/сек.$$

where δ is the semiwidth of the grain boundary. Orig. art. has: 7 formulas, 6 figures and 1 table.

SUB CODE: 11,20/ SUBM DATE: 01Feb65/ ORIG REF: 004/ OTH REF: 003

ARKHIPOVA, N.K.; KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

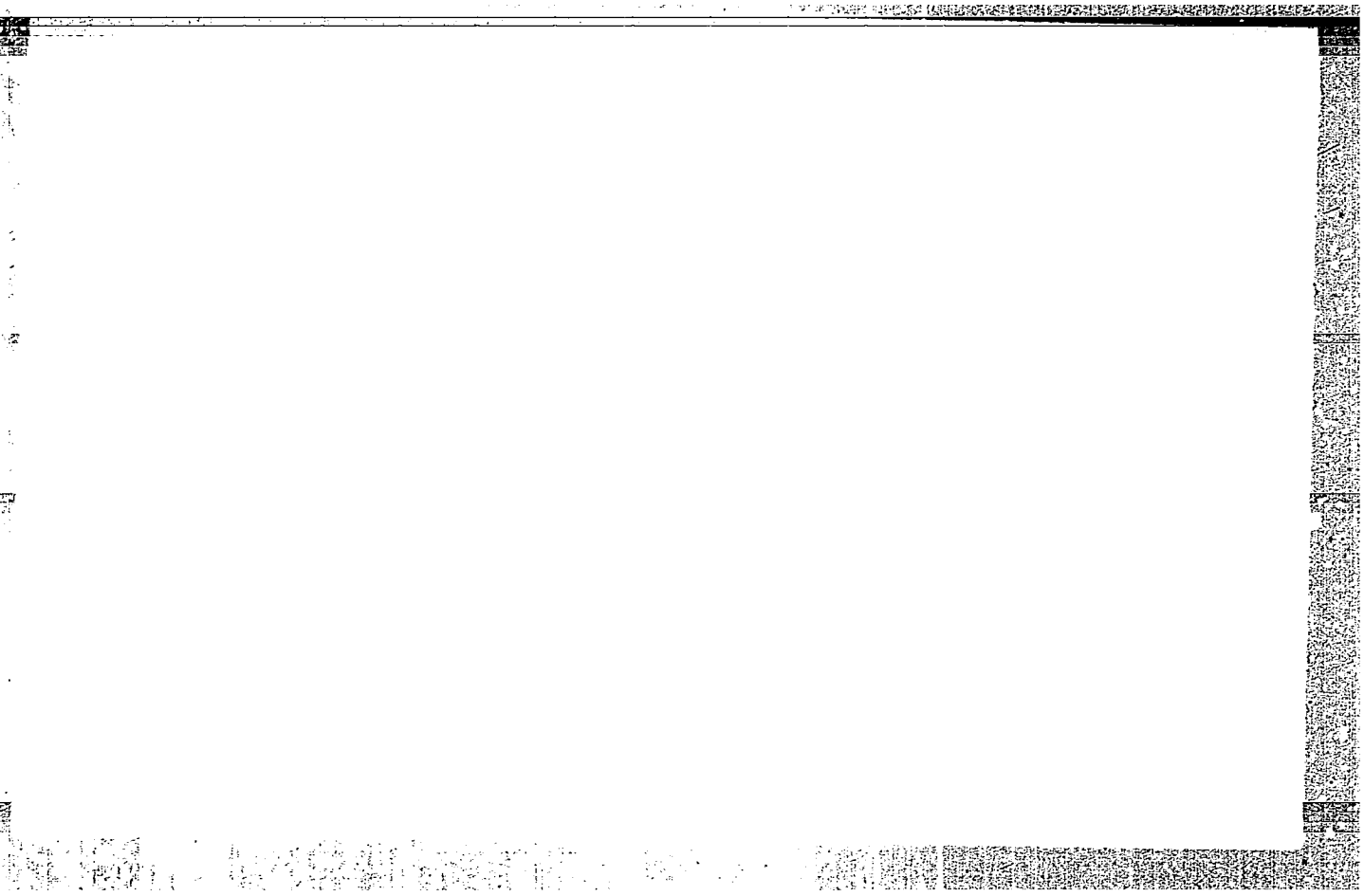
Intercrystalline electric transfer of silver in gold.
Fiz. met. i metalloved. 20 no.1:159-160 Jl '65.
(MIRA 18:11)

1. Institut fiziki metallov AN SSSR.

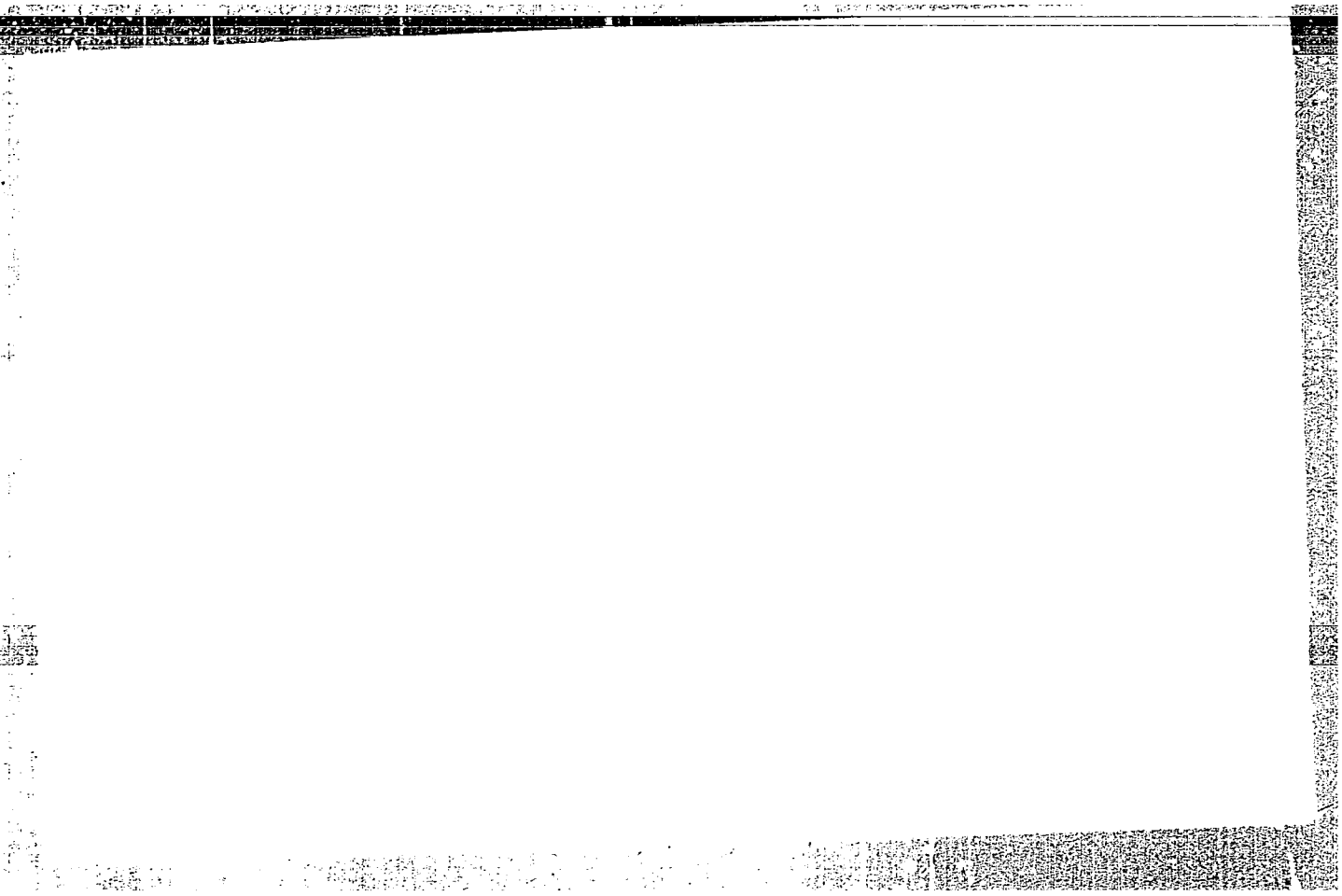
KLOTSMAN, S.M.; ARKHIPOVA, N.K.; TIMOFEYEV, A.N.; TRAKHTENBERG, I.Sh.

Silver diffusion in polycrystalline gold. Fiz. met. i metalloved. 20 no.3:390-395 S '65.
(MIRA 18:11)

1. Institut fiziki metallov AN SSSR.



APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001756420019-6"



APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001756420019-6"

TRAKHTENBERG I.S.

VYZHAROVA, Zhivka Nikolovna; TRET'YAKOV, P.N., otvetstvennyy redaktor; TRAKHTENBERG, I.S., redaktor izdatel'stva; ZEMLYAKOVA, T.A., tekhnicheskiy redaktor

[The origin of Bulgarian plowing tools; on the problem of the ethnogenesis of the Bulgarian people] O proiskhozhdenii bolgarskikh pakhotnykh orudii; k voprosu ob etnogeneze bolgarskogo naroda. Moskva, Izd-vo Akademii nauk SSSR, 1956. 53 p. (MLRA 10:3)
(Plows) (Bulgaria--History)

ARKHAROV, V.I.; KONEV, V.N.; TRAKHTENBERG, I.Sh.; SHUMILINA, S.V.

Role of nitrogen in the process of high temperature oxidation of chromium in contact with air. Issl. po zharopr. splav. 3:402-407 '58. (MIRA 11:11)
(Chromium) (Nitrogen) (Oxidation)

KLOTSMAN, S.M.; TIMOFEYEV, A.N.; TRAKHTENBERG, I. Sh.

Feasibility of determining the thickness of intercrystalline bonds on semiconductor bicrystals. Fiz. met. i metalloved. 11 no.6:951-952 Je '61. (MIRA 14:6)

1. Institut fiziki metallov AN SSSR.
(Semiconductors)
(Crystal lattices)

24(6) SOV/126-7-2-24/39

AUTHORS: Klotsman, S. M., Timofeyev, A. N. and Trakhtenberg, I.Sh.

TITLE: On the Problem of Determination of Diffusion Coefficients Using an "Integral Residue" Method (K voprosu ob opredelenii koeffitsiyentov diffuzii metodom "integral'nogo ostatka")

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 2, pp 295-298 (USSR)

ABSTRACT: Gruzin (Ref 1) proposed an "integral residue" method for measurement of diffusion coefficients in solids. The method is based on a calculation of an integral (total) activity of each of the layers of equal thickness which are cut off from a sample. This activity is deduced from the activities of the sample before and after cutting off the layer in question (the activity referred to may be, for example, radioactivity of a tracer). Gruzin assumed that activity is uniformly distributed in the cut-off layer. The present note proposes a method for establishing whether this assumption is justified and describes an approximate procedure for the case when the non-uniform distribution of activity in the cut-off

Card 1/2 layer has to be allowed for. The paper is entirely

On the Problem of Determination of Diffusion Coefficients Using an "Integral Residue" Method

theoretical.
There is one Soviet reference .

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Metal Physics, Ac. Sc., USSR)

SUBMITTED: April 22, 1958

[illegible], P.N.; [illegible], K.A., [illegible]

Results of orbilin treatment in tabes dorsalis. Vest. derm. i ven. 37 no.7:44-45 Jl '63. (MIRA 17:6)

1. Zavedyvayushchiy sifilidologicheskim otdeleniyem Kozhno-venerologicheskogo dispansera Daugavpilsa (for Schlesintsev). 2. Kozhno-venerologicheskiy dispanser Daugavpilsa (for Traktenberg).

L 22235-66

ACC NR: AP6010771 SOURCE CODE: UR/0146/66/009/001/0029/0034

AUTHOR: Aliyev, T. M.; Trakhtenberg, L. A.; Shcherbinin, Yu. V.; Ter-Khachaturov, A. A.

ORG: Azerbaydzhan Institute of Petroleum and Chemistry im. M. Azizbekov (Azerbaydzhanskiy institut nefti i khimii)

TITLE: A dynamic electrometer with a low input capacitance

39
B

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 1, 1966, 29-34

TOPIC TAGS: electrometer, capacitor, electric capacitance, voltmeter, millivoltmeter/V2-5(MVL-3) millivoltmeter

ABSTRACT: The authors have developed an electrodynamic capacitor in the form of an attachment to the standard V2-3 (MVL-3) millivoltmeter, which made it possible to produce a dynamic electrometer with a low input capacitance for measuring point surface charges. The construction of the electrodynamic capacitor is shown in the figure where *1* is a fixed plate, while plate *2* is the armature of an electromagnetic system whose magnetic circuit *3* is made in the form of a high-permeability steel cup with permanent magnet *4* fastened in the center. Coil *5* is fed by alternating current with a frequency ω to create a variable magnetic flux which excites oscillatory motion of armature *2* fastened to spring *6* made from a material with stable elastic properties, e. g. beryllium bronze. The electrometer has an input impedance of 10^{15} Ω and an in-

UDC: 621.317.723

Card 1/2

L 22235-66

ACC NR: AP6010771

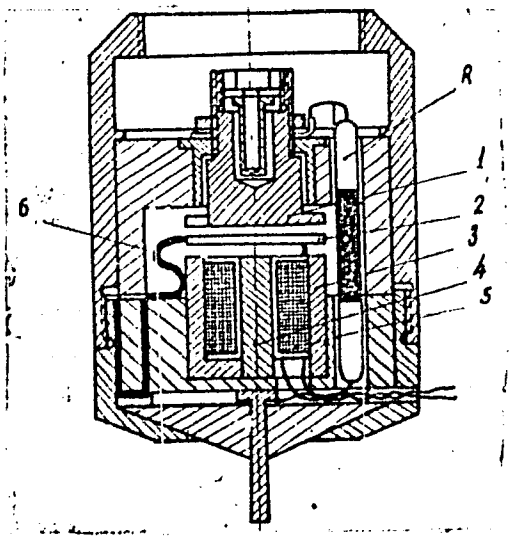


Fig. 1. Electrodynamic capacitor.

put capacitance of 2 μμf and may be used for measuring small charges at up to 1000... 1000 cps. Orig. art. has: 4 figures and 4 formulas. [14]

SUB CODE: 09/ SUBM DATE: 03Nov64/ ORIG REF: 004/

Card 2/2 nst

L 22725-66

ACC NR: AP6002928 SOURCE CODE: UR/0286/65/000/024/0088/0088

AUTHORS: Trakhtenberg, L. I.; Taranov, Yu. M.

ORG: none

TITLE: A vacuum gauge. Class 42, No. 177122

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 88

TOPIC TAGS: vacuum gage, pressure sensor, thermocouple

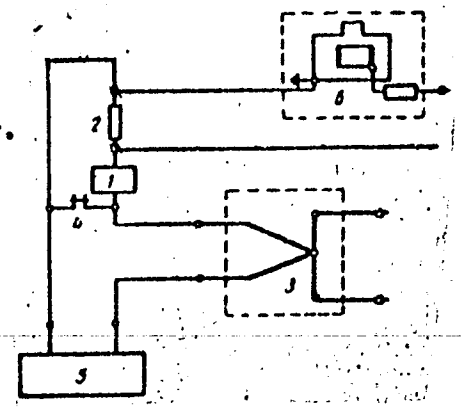
ABSTRACT: This Author Certificate presents a vacuum gage provided with a thermocouple pressure sensor, and a magnetic electric-discharge pressure sensor. The unit also contains a shunt, connected in series to the discharge gap circuit, and a voltage meter. The design provides a continuous and unique dependence of the voltage on the pressure in the entire range of measurements. The vacuum gage is connected to a reference voltage source compensating the voltage which drops in the shunt. This voltage source is connected in series between the shunt and the thermocouple (see Fig. 1). The gage also has a relay, the contacts of which are connected in series with the thermocouple and the voltage meter. These contacts shunt the magnetic electric-discharge sensor. The relay winding is

Card 1/2 UDC: 531.788.732

L 22725-66

ACC NR: AP6002928

Fig. 1. 1 - Reference voltage source; 2 - shunt; 3 - thermocouple sensor; 4 - relay contacts; 5 - voltage meter; 6 - magnetic electric-discharge sensor.



connected to the voltage meter circuit. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 17Aug64

Card 2/2 UVR

ACC NR: AP6015682 (N) SOURCE CODE: UR/0413/66/000/009/0079/0079

INVENTOR: Vikhorev, V. G.; Deniskin, V. P.; Trakhtenberg, L. I.

ORG: None

TITLE: An eddy current instrument for measuring the thickness and resistivity of sheet material. Class 42, No. 181306

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 79

TOPIC TAGS: eddy current, electronic measurement, resistivity

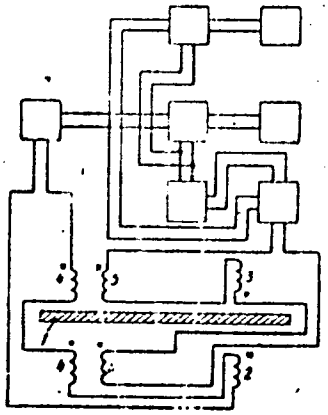
ABSTRACT: This Author's Certificate introduces an eddy current instrument for measuring the thickness and resistivity of sheet material. The unit contains an rf current generator, two overlapping eddy current pickups, phase detectors which are sensitive to changes in the thickness and resistivity of the sheet material and an indicator. The unit is designed for eliminating the effect which changes in the gap between the pickups and the sheet being inspected have on instrument readings. The device contains a shielded pickup with current and measurement coils with the same geometric specifications as the corresponding coils in the overlapping pickups, while the measurement coil in the shielded pickup has three times as many turns as that in the overlapping pickup. The current coils in all pickups are connected in series and are all in phase. The measurement coils in the overlapping pickups are likewise connected

Card 1/2

UDC: 531.717.11.621.317.33

ACC NR: AP6015682

in series and in phase with each other and in series and opposition with the measurement coil of the shielded pickup.



1--sheet being inspected; 2--current coil of the shielded pickup; 3--measurement coil of the shielded pickup; 4--current coils of the overlapping pickups; 5--measurement coils of the overlapping pickups

SUB CODE: 09/ SUBM DATE: 12Jul65

Card 2/2

L 18452-66 EWT(m)
ACC NR: AP6002562 (N) SOURCE CODE: UR/0286/65/000/023/0058/0058

AUTHORS: Ivanov, V. I.; Shcherbakov, V. I.; Trakhtenberg, L. I.

ORG: none

TITLE: Ultrasonic method for measuring product thickness. Class 42, No. 176713

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 58

TOPIC TAGS: ultrasonic equipment, ultrasonic inspection, test method

ABSTRACT: This Author Certificate presents an ultrasonic method for measuring product thickness by determining the resonance frequency of the system which consists of the monitored product, a liquid layer, and an ultrasonic detector. To increase the accuracy of measuring small thicknesses, e.g., less than 0.5 mm, and to decrease the operating frequencies, the system is excited at two fixed frequencies. The liquid layer thickness is varied, obtaining system resonance successively for each of the frequencies. The thickness of the product is determined by the difference of the liquid layer thicknesses corresponding to the resonances.

SUB CODE: 13, 20/ SUBM DATE: 18Jan65
Card 1/1

UDC: 531.717.1:534-8

L 38432-66 EWT(m)/EWP(t)/ETI IJP(c) JG/JD

ACC NR: AP6019579 SOURCE CODE: UR/0115/66/000/004/0050/0054

AUTHOR: Dankshevskiy, S. K.; Ipatova, S. I.; Oleynikov, P. P.; Oleynikova, L. D.; Pavlova, Ye. I.; Smirnova, N. I.; Trakhtenberg, L. I.

ORG: none

55

B

TITLE: Thermocouples made of molybdenum-rhenium alloys

SOURCE: Izmeritel'naya tekhnika, no. 4, 1966, 50-54

TOPIC TAGS: thermocouple, molybdenum containing alloy, rhenium containing alloy, temperature measurement

ABSTRACT: From a study of the phase diagram of the system it is evident that, with a high rhenium content in the alloy, there is formed a large grain chemical compound (α-phase) which makes mechanical working difficult. Therefore, the present investigation was limited to pure rhenium and to alloys with a rhenium content of not more than 50 weight percent rhenium. The starting materials for production of the alloys were molybdenum powder and ammonium perrhenate. A mixture of molybdenum with a calculated amount of ammonium perrhenate was reduced in a stream of hydrogen in two stages, at temperatures of 350 and 950°C. The powder obtained was pressed into tablets and sintered in a hydrogen medium.

Card 1/2

UDC: 536.532

L 38432-66

ACC NR: AP6019579

Mechanical working of the alloys containing up to 30% of the alloying additive was analogous to that commonly used for molybdenum. The dependence of the electromotive force of the thermocouples on temperature for different alloys of molybdenum and rhenium was determined up to 1800°C. A platinum-platinum rhodium thermocouple was used as a control. Results are exhibited in a series of curves. The thermoelectric and mechanical properties of the thermocouples are listed in several large tables. It is concluded that thermocouples made of molybdenum-rhenium alloys can be used for temperature measurements in hydrocarbon media, for a limited time, not exceeding 1 to 2 hours, at temperatures up to 1500°C. Orig. art. has: 5 figures and 4 tables. [06]

SUB CODE: 11, 20 SUBM DATE: none/ ORIG REF: 006/ OTH REF: 003
09

Card 2/2

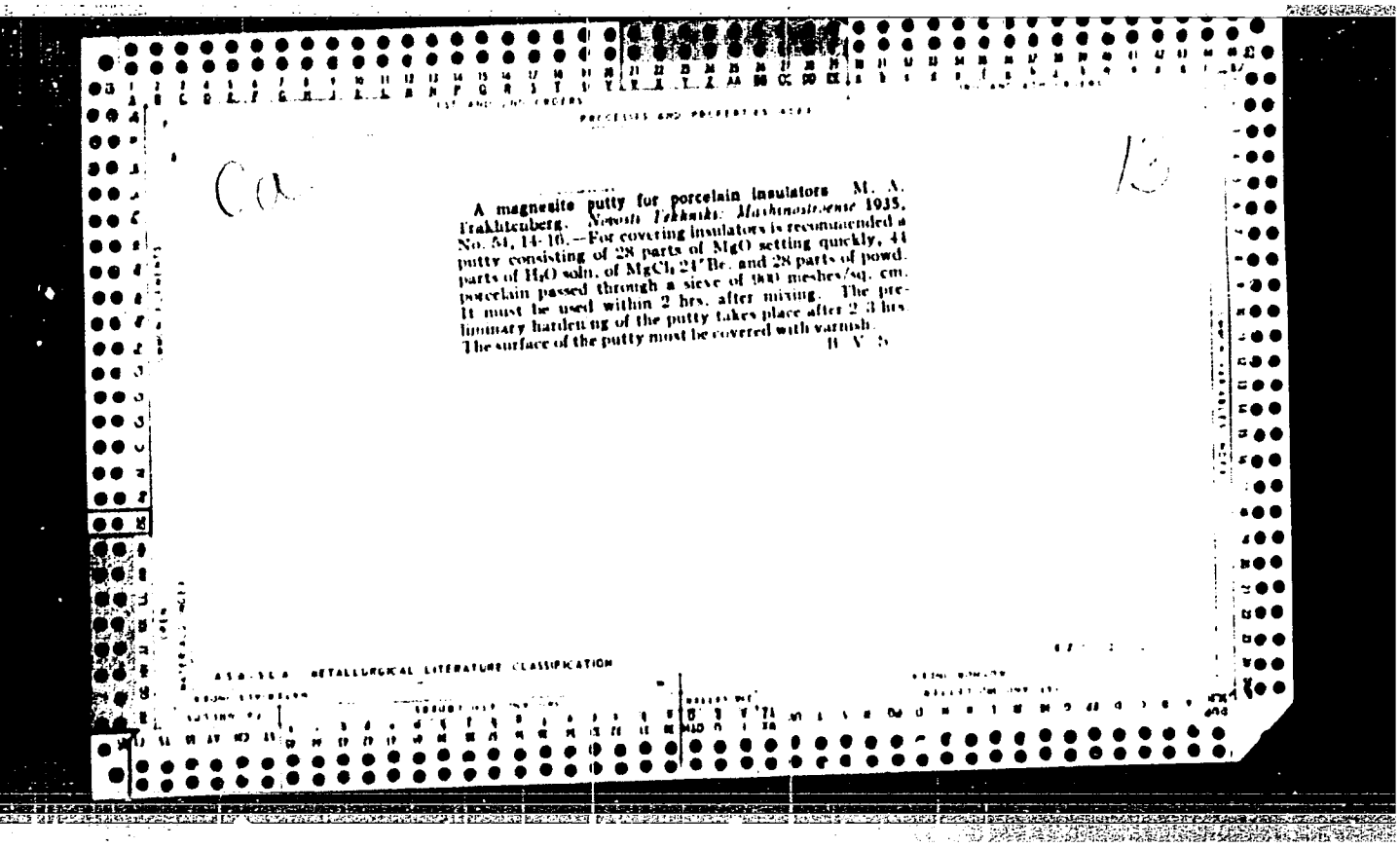
TRAKHTENBERG, Lev Solomonovich; SABASHNIKOVA, Ye.S., red.; REYZMAN, Ye.Ya., tekhn. red.

[Motion pictures and the operator of sound recording and reproducing systems] Kinofil'm i zvukooperator. Moskva, Iskusstvo, 1963. 190 p. (MIRA 16:12)
(Motion pictures, Talking)

TRAKHTENBERG, L.Ya., kand.med.nauk

Diagnosis of so-called secondary atelectasis of the lungs in the examination of the corpses of newborn infants. Sud.-med.ekspert 2 no.4:19-21 O-D '59. (MIRA 13:5)

1. Kafedra sudebnoy meditsiny (zav. - doktor meditsinskikh nauk A.S. Litvak) Stavropolskogo meditsinskogo instituta.
(LUNGS--COLLAPSE) (INFANTS (NEWBORN)--DISEASES)



A magnesite putty for porcelain insulators. M. A. Frakhtenberg. *Novosti Tekhniki Mashinostroenie* 1935, No. 51, 14–16.—For covering insulators is recommended a putty consisting of 28 parts of MgO setting quickly, 44 parts of H_2O soln. of $MgCl_2$ 24° Be., and 28 parts of powd. porcelain passed through a sieve of 900 meshes/sq. cm. It must be used within 2 hrs. after mixing. The preliminary hardening of the putty takes place after 2–3 hrs. The surface of the putty must be covered with varnish. B. V. S.

ASD-SEA METALLURGICAL LITERATURE CLASSIFICATION

KOZLOV, Viktor Borisovich; LYSENKO, Il'ya Mitrofanovich; MATVEYEV, Aleksandr Nikolayevich; TRAKHTENBERG, Moisey Vladimirovich; USPENSKIY, Yevgeniy Ivanovich; GOLOVANOV, A.L., red.; KHITROV, P.A., tekhn.red.

[Detection of defects in rails] Rel'sovaia defektoskopiia. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 230 p. (MIRA 12:6)
(Railroads--Rails)

Трахтенберг, М.Б.

DEKHTYAR, S.N., inzh.; TRAKHTENBERG, M.B., inzh.

Demonstration highway at the exhibition in Kiev. Avt. dor. 21 no.1: 39-40 Ja '58. (MIRA 11:1)

(Kiev--Roads, Experimental)

TRAKHTENBERG, M D

AUTHOR: Beyrakh, Z. Ya., Candidate of Technical Sciences, and Trakhtenberg, M. D., Engineer.

TITLE: On the problem of automatic control of boilers operating in parallel. (K voprosy ob avtomaticheskom regulirovanii parallelno rabotayushchikh kotlov.)

PERIODICAL: "Energomashinostroenie", (Power Machinery Construction), 1957, No. 4, pp.5-9, (U.S.S.R.)

ABSTRACT: Various circuits of controlling such feeding in the case of automatic control of the pressure in the main steam supply piping are investigated for parallel operating drum type boilers and the results are compared of analytical investigations of the transient processes of the investigated controls. The following control circuits are compared: a single pressure regulator in the main steam piping (without individual regulators, Fig.1, I; individual pressure regulators, II; individual steam load regulators, III; individual heat load regulators, IV. The transient processes are most favourable for II. Hoever, from the point of view of the practicability of producing satisfactorily metering devices for the individual

On the problem of automatic control of boilers operating parallel. (Cont.)

regulators, III is more favourable. The transient processes are favourable for external as well as internal disturbances in the case of utilizing individual heat load regulators (IV) and regulation on this principle is considered best for all the operating conditions of the boilers and distrubances which were considered in this paper; the command impulse from the main regulator to the individual regulators determines the heat load which is maintained constant. This impulse can be utilized also in the air regulator for maintaining the "heat-air" ratio, which permits better organization of the feeding of air into the boiler. 6 figures, including graphs. 3 Russian references.

TRAKHTENBERG, M.G.

Benign stomach tumors of nonepithelial origin. Khirurgiia 33 no.6: 34-38 Je '57. (MIRA 10:12)

1. Iz khirurgicheskoy kliniki (dir. - prof. V.S.Rozanov) Klinicheskoy ordena Lenina gorodskoy bol'nitsy imeni Botkina (glavnyy vrach - prof. A.N.Shabanov)

(STOMACH NEOPLASMS, case reports
benign tumors of non-epithelial origin)

DESYATOV, M.M., kand.med.nauk, zaslyzhennyy vrach RSFSR., TRAKHTENBERG, M.G., ordinator.

Adenomas of the adrenal cortex [with summary in English]. Khirurgiia 34 no.10:35-41 O'58 (MIRA 11:11)

1. Iz kafedry III khirurgii TSentral'nogo instituta usovershenstvovaniya vrachey (zav. - prof. B.S. Rozanov) na baze bol'nitsy imeni S.P. Botkina (glavnyy vrach - prof. A.N. Shabnov).
(ADRENAL CORTEX, neoplasms
adenoma, diag. & surg. (Rus))

TRAKHTENBERG, M.G.

Malignant degeneration of adenoma of the adrenal cortex. Khirurgiia 36 no.8:115-118 Ag '60. (MIRA 13:11)

1. Iz 3-y kafedry khirurgii (zav. - prof. B.S. Rozanov) TSentral'nogo instituta usovershenstvovaniya vrachey na baze Klinicheskoy bol'nitsy imeni S.P. Botkina (glavnyy vrach A.N. Shabanov).
(ADRENAL CORTEX--CANCER)

TRAKHTENBERG, M.G.

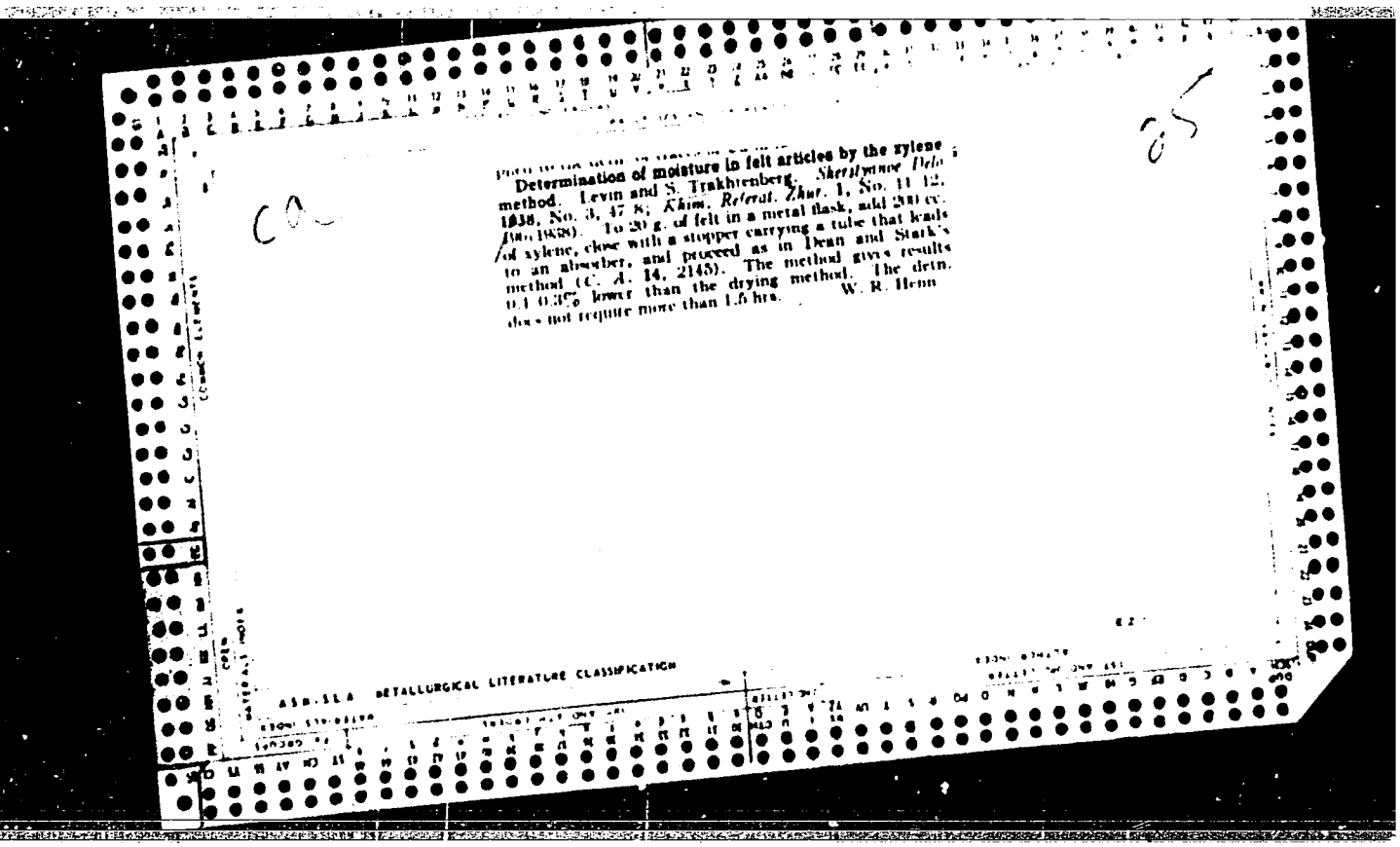
Two cases of ovarian disgerminoma. Sov. med. 27 n.10: 115-117 O '63. (MIRA 17:6)

1. Iz 1-y kafedry khirurgii (zaveditel' - zasluzhennyy deyatel' nauk prof. B.S. Rozanov) Tsentral'nogo instituta usovershenstvovaniya vrachey na baze klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina (glavnyy vrach - dotsent Yu.G. Antonov).

TRAKHTENBERG, I.G. (Moskva, Leningradskiy prospekt, 44, kv. 23)

Removal of arrhenoblastoma -- a virilizing tumor of the ovary. (MIRA 18:5)
Vest. khir. 92 no.6:115-116 Je '64.

1. Iz 1-y kafedry khirurgii Tsentral'nogo instituta usovershenstvovaniya vrachey i khirurgicheskoy kliniki ordena Lenina gorodskoy bol'nitsy imeni Botkina (zav. - prof. B.S. Kozanov, glavnyy vrach - dotsent Yu.I. Antonov).



Determination of moisture in felt articles by the xylene method. Levin and S. Trakhtenberg. *Sherstyanoe Delo* 1938, No. 3, 47-8; *Khim. Referat. Zhur.* 1, No. 11-12, 108 (1938). To 20 g. of felt in a metal flask, add 200 cc. of xylene, close with a stopper carrying a tube that leads to an absorber, and proceed as in Dean and Stark's method (*C. A.* 14, 2145). The method gives results 0.1-0.3% lower than the drying method. The detn. does not require more than 1.5 hrs. W. R. Henn

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

TRAKHTENBERG, M.V., kand. tekhn. nauk

Fundamentals of metal testing with the eddy current method; amplitude-phase analysis. Trudy TSNII MPS no.243:47-79 '62. (MIRA 16:6)

(Railroads—Rails—Testing)
(Electric currents, Eddy)

KOZLOV, V.B.; LYSENKO, I.M.; MATVEYEV, A.N.; TRAKHTENBERG, M.V.; USPENSKIY, Ye.I.; GURVICH, A.K.; BESPALOV, B.N., inzh., retsenzent; SPASSKIY, D.S., inzh., red.; MEDVEDEVA, M.A., tekhn. red.

[Flaw detection in reails] Rel'sovaia defektorskopiia. [By] V.B.Kozlov i dr. Izd.2., perer. i dop. Moskva, Transzheldorizdat, 1963. 286 p. (MIRA 16:8)
(Railroads--Rails--Defects)
(Nondestructive testing)

KOTKOV, I.I.; BELIKOV, B.S., v.o.golovnogo inzhenera; TRAKHTENBERG, M.Yu., gologniy konstruktor; KLEVAYCHUK, P.I.; FILATOVA, O.I.; KRAVCHENKO, O.M.; RODENKO, G.O.; BARDASH, O.P., spetredaktor

[Dwellings of two rooms and a kitchen-dining room] Zhylyi budynok na dvi kimnaty z kukhneiu-idal'neiu. Proekt No.075. Kyiv, Vydavnychyi viddil, 1953. 18 plans. (MLRA 9:12)

1. Ukraine. Upravlinnya v spravakh sil'skogo i kolgospnogo budivnytstva. 2. Direktor Diprosil'budu (for Kotkov) 3. Kerivnik APM-3 (for Klevaychuk)
(Dwellings)

VELIKOSELETS, I., student; LINEVICH, Ya., student; FRONICHEV, Ye., student; MAKLETSOVA, N., dotsent, nauchnyy rukovoditel'; TRAKHTENBERG, N., dotsent, nauchnyy rukovoditel'.

New principles in planning and building large urban residential blocks as exemplified by the planning of a microdistrict in the city of Minsk. Sbor.nauch.trud.Bel.politekh.inst. no.81: 139-146 '59. (MIRA 13:5)
(Minsk--City planning)

TRAKHTENBERG, N.A.

Further improvement in the arrangement for continuous cooking. (MIRA 11:3)
Spirt. prom. 24 no.2:23-24 '58.
(Distilling industries) (Grain milling machinery)

Trakhtenberg, N. M.

AUTHORS: Luninskiy, A. R. and Trakhtenberg, N. M. 268

TITLE: Junction transistor binary frequency dividers. (Binarnyye deliteli chastoty na ploskostnykh poluprovodnikovykh triodakh).

PERIODICAL: "Elektrosvyaz'" (Telecommunications), 1957, No.4, April, pp. 33 - 39 (U.S.S.R.)

ABSTRACT: Properties of germanium junction transistors, especially their temperature dependence, present certain difficulties when transistors are used for frequency division. These difficulties can be overcome in binary scalers and the present article gives the results of experimental investigation of such systems. It is shown that, by a rational choice of the parameters of trigger circuits and of their operating conditions, it is possible to achieve a reliable operation action over wide frequency ranges, large ambient temperature and supply voltage variations. A single trigger circuit is first considered and a means of stabilisation against temperature variation is given. The necessity of loose coupling between stages is discussed. Experimental trigger circuits built around transistors P1E, P1I and P1ZH showed the following characteristics: Bottoming at approximately 30% of supply voltage; steep edges (due to small loading): leading edge 1.5 to 2 μsec for P1E, 0.8 μsec for P1ZH and 0.5 μsec for P1I: stable

Junction transistor binary frequency dividers. (Cont.)

operation at approximately 100 kc/s for P1E, 200 to 300 kc/s for P1ZH, 400 to 500 kc/s for P1I; temperature range -60° to 70°C, with short-time overheating up to +80°C and longer (up to a few days) up to +70°C; stable operation for ± 40% variation of supply voltage at normal temperatures and for ± 20% at +70°C; the circuit compares favourably with that of E. Sard, as described in the Convention Record of the IRE, Part 2, 1954 (1). Next, frequency dividers, with scaling factors 2^n, using n above trigger circuits, are described and their performance discussed. The maximum scaling-down factor obtained was 256 (2^8) and again their performance was found to be better than that of (1). Feed-back was also tried. It was found that its application permits the division by 3 and 5, depending on feed-back used. Division by 3, using two flip-flops based on P1ZH transistors and with series feed-back only, could be obtained up to +70°C at frequencies up to 100 kc/s. 3 circuit diagrams of the basic trigger circuit and of the dividers, including one variable 1-32, based on the "Variable Binary Scaler" of D. Murray (2), a table of switching sequences for the latter and two graphs of pulse shapes against temperature are given. There are two references.

"Binary Frequency Dividers using Junction Transistors" by A.R. Luninskiy and N.M. Trakhtenberg, Elektrosvyaz', No 4, April 1957, pp 33-39.

The characteristics of modern transistors (germanium), particularly their temperature limits, create considerable difficulties in the design of frequency-divider circuits. These difficulties can be overcome, to a considerably extent, in binary dividers consisting of a series of trigger cells which, as is known, are quite stable despite changes in the various factors that effect the operation of the triggers.

The particular triggers described in the article employ P1E and P1Zh junction transistors. Frequency dividers composed of such triggers can provide frequency division by an integral number n, within a limit 2^n (where n is the number of trigger cells). It is shown that by properly choosing the circuit and the conditions of the trigger it is possible to obtain reliable operation of the frequency divider over a wide range of frequency variation, a wide range of ambient, and a

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1955).

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TRAKHTENBERG, E.M., kand. tekhn. nauk

Consideration of hysteresis in analysis of the dynamics of an electric drive. Izv. vys. ucheb. zav.; energ. 8 no.1:34-40 Ja '65. (MIRA 18:2)

1. Ivanovskiy energeticheskiy institut imeni V.I. Lenina. Predstavlena kafedroy elektroprivoda i avtomatizatsii promyshlennykh ustanovok.

TRAKHTENBERG, R.M. (Ivanovo)

A discrete static speed controller for a d.c. motor. Avtom.i telem. 24 no.1:64-74 Ja '63. (MIRA 16:1)
(Electric motors, Direct current)
(Electric controllers)